
ENVIRONMENTAL Fact Sheet



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Universal Waste Lamps: Information for Small Businesses

INTRODUCTION

Fluorescent and high intensity discharge (HID) lamps, also called universal waste lamps (UWLs), contain a small amount of mercury as well as small quantities of lead and cadmium that can pose a hazard to human health and the environment when improperly managed. Mercury is a highly toxic heavy metal that never breaks down into less toxic components, and accumulates in living tissue resulting in adverse health effects. When UWLs are broken, the mercury can contaminate the air, soil, surface water and groundwater. In New Hampshire, mercury contamination has led to a state-wide fish consumption advisory being issued by the DES Environmental Health Program – see www.des.nh.gov/pdf/Mercury_fish.pdf.



WHAT ARE UNIVERSAL WASTES?

As their title implies, UWLs belong to a special category of hazardous wastes called “universal wastes,” which are regulated by the New Hampshire [Universal Waste Rules](#) (Env-Wm 1000). In New Hampshire, universal wastes include batteries, fluorescent and HID lamps (UWLs), thermostats, mercury-containing devices, antifreeze, cathode-ray tubes and certain pesticides. Universal wastes are generated by all segments of the population, are hazardous by definition, and are often mismanaged despite regulations intended to ensure proper handling and disposal. To improve their overall management, the [Universal Waste Rules](#) exempt universal wastes from most New Hampshire [Hazardous Waste Rules](#) requirements as long as the universal wastes are handled and disposed of in a manner that protects human health and the environment.

REQUIREMENTS FOR MANAGING UNIVERSAL WASTE LAMPS

It is illegal to dispose of any fluorescent lamp as a solid waste as of January 1, 2008. In fact, any product that contains intentionally-added mercury is also banned from disposal in a solid waste landfill, incinerator or transfer station. Standard fluorescent lamps contain between 15 mg and 40 mg of mercury and are classified as a hazardous waste under the *Hazardous Waste Rules*. Green end cap, or low-mercury fluorescent lamps, are **not** “mercury free”; they contain approximately 10 mg of mercury and may not be disposed of as solid waste. Managing spent fluorescent lamps as a *universal* waste, however, is cheaper and easier than managing them as *hazardous* waste.

WHAT IS A UNIVERSAL WASTE LAMP HANDLER?

A “handler” is anyone who generates, stores, manages or transports UWLs, but is generally a business and not a homeowner. There are three classes of handlers: 1) small quantity handlers, who accumulate less than 5,000 kilograms (approx. 11,000 lbs) of combined universal wastes at any time; 2) large quantity handlers, who accumulate between 5,000 and 20,000 kg of combined universal wastes at any one time; and 3) very large quantity handlers, who accumulate 20,000 or more kg of combined universal waste at any one time.



REQUIREMENTS FOR SMALL QUANTITY UNIVERSAL WASTE LAMP HANDLERS

Labeling

Each UWL, or container of UWLs, must be clearly labeled with one of the following phrases: “Universal Waste – Lamp(s),” “Waste Lamps,” or “Used Universal Waste Lamps,” and the date the first lamp was placed in the container.



Containers

Store intact UWLs in containers that are compatible with the universal waste, in good condition, and closed at all times, except when UWLs are being added to, or removed from, the container. Containers stored outside must be covered to prevent contact with precipitation.



Accumulation Time Limits

UWLs may be accumulated for no longer than one year from the date the UWLs are generated or received from another handler; however, they may be stored for longer than one year with permission from DES. The length of time the UWLs have been accumulated must be documented starting from the date the UWLs became waste or were received by labeling the beginning accumulation date on the storage container, or by maintaining an inventory system on-site that identifies the earliest date UWLs were added to a container or received from off-site.

Training

No special training is necessary for small quantity handlers to manage UWLs. Simply ensure that all employees who handle or have responsibility for managing UWLs are thoroughly familiar with appropriate handling and emergency procedures.

Self Transporting/Shipping UWLs

Handlers may self transport their UWLs, but only to another handler, an authorized lamp recycling facility, or an authorized hazardous waste facility. Prior to sending a shipment of UWLs to another handler or destination facility, the originating handler must ensure that the receiving handler agrees to accept the shipment. A hazardous waste hauler and manifest are not required to transport or ship UWLs within New Hampshire, although some form of tracking, such as a bill of lading, is required. Shipments must meet all applicable United States Department of Transportation (USDOT) regulations for UWLs. In part, this means that UWLs must be shipped in a secure, sturdy, compatible container. If a UWL shipment is rejected by an intermediate handler or destination facility, arrangements must be made by the originating

handler to receive the waste UWLs back when notified that the shipment has been rejected, or the original handler must send the waste lamp shipment to an alternate facility.

Disposal Destinations for UWLs

UWLs must be taken to a state-approved destination for disposal. Handlers need to be familiar with the practices of the disposal destination they choose, as they are responsible for their UWLs from “cradle-to-grave,” just like any other hazardous waste.



Handling Procedures for Broken or Damaged UWLs

Broken UWLs may still be managed as a universal waste, but are considerably more expensive to recycle or dispose of. **Note: handlers and transporters may not intentionally crush, dismantle or treat UWLs unless a permit has been obtained in accordance with New Hampshire Hazardous Waste Rules Env-Wm 353.** If a lamp breaks, clean up procedures may be found at

www.des.nh.gov/nhppp/UW/lamp_cleanup2.pdf.



FOR MORE INFORMATION

For more information on requirements for UWLs please refer to www.des.nh.gov/factsheets/hw/hw-7.htm.

Questions on *Universal Waste Rules* should be directed to DES's Pollution Prevention Section at (603) 271-2956, or the Hazardous Waste Compliance Section at (603) 271-2942.

A list of mercury containing lamp recycling facilities, DES's New Hampshire Mercury Reduction Strategy, copies of other fact sheets, and the *Hazardous Waste Rules* are available from DES's Public Information and Permitting Office at (603) 271-2975 (TDD Access: Relay NH 1-800-735-2964). Copies of DES fact sheets and rules are also available on DES's web site at www.des.nh.gov.

Information on USDOT regulations can be obtained from the NH Department of Safety, Hazmat Unit at (603) 271-3349.